What is claimed:

1.   A method of converting input data marked up in any one of a plurality of markup formats, comprising:

providing the input data from at least one source, the input data marked up in at least one of a plurality of markup formats; and

processing the input data directly in any one of the plurality of markup formats to transform the input data into output data in any one of the plurality of markup formats.

2.   A method of converting input data as recited in claim 1, wherein processing, comprises:

generating a first request and a second request;

accessing, in response to the first request, the input data from the at least one source;

standardizing the input data to generate standardized data in one of the plurality of markup formats; and

transforming, in response to the second request, the standardized data into output data in any one of the plurality of markup formats.

3.   A method of converting input data as recited in claim 2, wherein transforming comprises:

selecting at least one transformation script from a plurality of transformation scripts, wherein at least one transformation script comprises a plurality of template procedures;

reading the standardized data in one of the plurality of markup formats;

interpreting the standardized data; and

applying at least one transformation script to the standardized data in one of the plurality of markup formats to transform the standardized data into output data in any one of the plurality of markup formats applicable in a particular application.

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4.   A method of converting input data as recited in claim 3, wherein the input data comprises an input document having a first tree structure of nodes that represents the input data, wherein the output data comprises an output document, and wherein the step of transforming comprises:

generating the output document having a second tree structure of nodes, wherein the output document having the second tree structure of nodes corresponds to the input document having the first tree structure of nodes.

5.   A method of converting input data as recited in claim 3, wherein applying the transformation script comprises:

selecting at least one template procedure from the plurality of template procedures based on an applytemplates instruction;

determining content collection actions in the at least one template procedure; and

executing selected ones of the at least one template procedure on the standardized data to construct the output data, based on the content collection actions.

6.   A method of converting input data as recited in claim 4, wherein each of the template procedures is described by a template tag.

7.   A method of converting input data as recited in claim 6, wherein the input document marked up in the first markup format, and wherein the output document is marked up in any one of the plurality of markup formats.

8.   A method of converting input data as recited in claim 1, wherein providing the input data from at least one source comprises:

providing input data from a plurality of data sources, wherein at least one of the plurality of data sources includes input data in one of a plurality of markup formats and input data from others of the plurality of data sources in other markup formats of the plurality of markup formats.

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9.   A method of converting input data as recited in claim 1, wherein providing the input data is preceded by:

requesting input data in any one of the plurality of markup formats.

10.   A method of converting input data as recited in claim 9, further comprising:

outputting the output data to a user in any one of the plurality of markup formats.

11.   A method of converting input data as recited in claim 10, further comprising:

transferring the output data across a network to a presentation interface for display.

12.   A method of converting input data as recited in claim 1, wherein the plurality of markup formats are selected from the group comprising HTML markup format, XML markup format and WML markup format.

13.   A method of converting input data as recited in claim 2, wherein the standardized data is in an XML markup format.

14.   A method of converting input data as recited in claim 1, wherein the input data in an input data stream and wherein the output data is an output data stream.

15.   A method of converting input data as recited in claim 6, wherein generating the standardized input data in one of the plurality of markup formats is performed by a fault tolerant SGML parser, wherein the fault tolerant SGML parser provides fault-tolerant analysis of the marked up input data such that the input data conforms to XML standards, and wherein the fault tolerant SGML parser dynamically generates a tree of the resulting document that represents content of the input data.

16.   A method of converting input data as recited in claim 4, wherein each of the template procedures comprises:

first selection information comprising a range of traversal of the first tree structure of the first document;

second selection information comprising a tag of the first document to which the template procedure is applied; and

at least one action from a plurality of actions.

17.   A method of converting input data as recited in claim 16, wherein at least some template procedures include actions surrounded by the tag defined by the second selection information, wherein the actions collect information.

18.   A method of converting input data as recited in claim 4, wherein executing comprises:

traversing selected nodes of the first tree structure, wherein selected nodes are nodes in a range defined by the first selection information of the template procedure;

determining, for each node traversed, whether a tag corresponding to the node matches the second selection information;

executing at least one corresponding action if a tag corresponding to the node matches the second selection information; and

constructing the second document based on content collection actions in the at least one template procedure that is executed.

19.   A method of converting input data as recited in claim 16, wherein the actions of at least one template procedure includes instructions for calling other template procedures.

20.   A method of converting input data as recited in claim 19, wherein the first selection information is based on a starting node from which the template procedure is called.

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21. A method of converting input data as recited in claim 20, wherein at least one template procedure includes actions creating at least one cloistered temporary variable that is inherited by any template procedures called by the at least one template procedure.

22. A method of converting input data as recited in claim 20, wherein the template procedures include a base template procedure having the second selection information that corresponds to a root node of the tree structure of the first document such that actions of the base template procedure comprise a call of template procedures.

23. A method of converting input data as recited in claim 22, wherein the actions of the base template procedure comprises calling template procedures having second selection information that corresponds to a "body" tag.

24. A method of converting input data as recited in claim 23, wherein the tree structure of nodes of the first document comprises frame nodes, and wherein actions of the base template procedure comprise calling of template procedures having second selection information that matches a frameset tag.

25. A method of converting input data as recited in claim 24, wherein at least certain template procedures comprise at least one action of redirection toward a first different document.

26. A method of converting input data as recited in claim 25, wherein at least certain template procedures comprise at least one conditional action based on content of an access address of the first document.

27. A method of converting input data as recited in claim 26, wherein at least certain template procedures comprise at least one action constituting a method of an object and/or at least one action constituting a programmed local function.

28.   A method of converting input data as recited in claim 27, wherein certain template procedures comprise a local anchoring function that converts a request, adapted to the structure of the second document, into an address of a first document containing the requested information.

29.   A method of converting input data as recited in claim 28, wherein constructing the second document comprises:

writing content in certain template procedures that have second selection information that defines a content tag, wherein writing can assemble at least one part of contents of the content tag in a predetermined manner.

30.   A method of converting input data as recited in claim 29, wherein the first documents comprise pages structured in a first standard markup language adapted to consultation on a client computer station via the Internet, and wherein the second documents comprise pages structured in a second standard markup language which is adapted to consultation on a portable wireless communicator.

31.   A method of converting input data as recited in claim 30, wherein constructing the second document comprises:

constructing the second document in dynamic mode during a session between a wireless communicator that displays information in a structure of the second document and a server that returns information in a structure of the first document.

32.   A method of converting input data as recited in claim 1, wherein the input data is marked up in an HTML markup format and wherein the output data is marked up in an HTML markup format.

33.   A method of converting input data as recited in claim 1, wherein the input data is marked up in an HTML markup format and wherein the output data is marked up in an XML markup format.

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34. A method of converting input data as recited in claim 1, wherein the input data is marked up in an HTML markup format and wherein the output data is marked up in a WML markup format.

35. A method of converting input data as recited in claim 1, wherein the input data is marked up in an XML markup format and wherein the output data is marked up in an XML markup format.

36. A method of converting input data as recited in claim 1, wherein the input data is marked up in an XML markup format and wherein the output data is marked up in an HTML markup format.

37. A method of converting input data as recited in claim 1, wherein the input data is marked up in an XML markup format and wherein the output data is marked up in a WML markup format.

38. A method of converting input data as recited in claim 1, wherein the input data is marked up in a WML markup format and wherein the output data is marked up in a WML markup format.

39. A method of converting input data as recited in claim 1, wherein the input data is marked up in a WML markup format and wherein the output data is marked up in an HTML markup format.

40. A method of converting input data as recited in claim 1, wherein the input data is marked up in a WML markup format and wherein the output data is marked up in an XML markup format.

41.   A system adapted to convert input data marked up in any one of a plurality of markup formats, comprising:

means for providing the input data from at least one source, the input data marked up in at least one of a plurality of markup formats; and

means for processing the input data directly in any one of the plurality of markup formats to transform the input data into output data in any one of the plurality of markup formats.

42.   A system adapted to convert input data as recited in claim 41, wherein means for processing, comprises:

means for generating a first request and a second request;

means for accessing, in response to the first request, the input data from the at least one source;

means for standardizing the input data to generate standardized data in one of the plurality of markup formats; and

means for transforming, in response to the second request, the standardized data into output data in any one of the plurality of markup formats.

43.   A system adapted to convert input data as recited in claim 42, wherein means for generating comprises:

means for selecting at least one transformation script from a plurality of transformation scripts, wherein at least one transformation script comprises a plurality of template procedures.

44.   A system adapted to convert input data as recited in claim 43, wherein means for transforming comprises:

means for reading the standardized data in one of the plurality of markup formats;

means for interpreting the standardized data; and

means for applying at least one transformation script to the standardized data in one of the plurality of markup formats to transform the standardized data into output data in any one of the plurality of markup formats applicable in a particular application.

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45. A system adapted to convert input data as recited in claim 44, wherein the input data comprises an input document having a first tree structure of nodes that represents the input data, wherein the output data comprises an output document, and wherein the means for transforming comprises:

means for generating the output document having a second tree structure of nodes, wherein the output document having the second tree structure of nodes corresponds to the input document having the first tree structure of nodes.

46. A system adapted to convert input data as recited in claim 44, wherein means for applying the transformation script comprises:

means for selecting at least one template procedure from the plurality of template procedures based on an applytemplates instruction;

means for determining content collection actions in the at least one template procedure; and

means for executing selected ones of the at least one template procedure on the standardized data to construct the output data, based on the content collection actions.

47. A system adapted to convert input data as recited in claim 46, wherein the input document marked up in the first markup format, and wherein the output document is marked up in any one of the plurality of markup formats.

48. A system adapted to convert input data as recited in claim 41, wherein means for providing the input data from at least one source comprises:

means for providing input data from a plurality of data sources, wherein at least one of the plurality of data sources includes input data in one of a plurality of markup formats and input data from others of the plurality of data sources in other markup formats of the plurality of markup formats.

49. A system adapted to convert input data as recited in claim 41, wherein means for providing the input data is preceded by:

means for requesting input data in any one of the plurality of markup formats.

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50.   A system adapted to convert input data as recited in claim 49, further comprising: means for outputting the output data to a user in any one of the plurality of markup formats.

51.   A system adapted to convert input data as recited in claim 50, further comprising: means for transferring the output data across a network to a presentation interface for display.

52.   A system adapted to convert input data as recited in claim 41, wherein the plurality of markup formats are selected from the group comprising HTML markup format, XML markup format and WML markup format.

53.   A system adapted to convert input data as recited in claim 42, wherein the standardized data is in an XML markup format.

54.   A system adapted to convert input data as recited in claim 41, wherein the input data in an input data stream and wherein the output data is an output data stream.

55.   A system adapted to convert input data as recited in claim 46, wherein means for standardizing the input data activates data sources to obtain the input data and wherein the means for standardizing includes a fault tolerant SGML parser adapted to generate the standardized data by providing fault-tolerant analysis of the marked up input data such that the input data conforms to XML standards, and wherein the fault tolerant SGML parser dynamically generates a tree of the resulting document that represents content of the input data.

56.   A system adapted to convert input data as recited in claim 44, wherein each of the template procedure comprises:

first selection information comprising a range of traversal of the first tree structure of the first document;

second selection information comprising a tag of the first document to which the template procedure is applied; and

at least one action from a plurality of actions.

57.   A system adapted to convert input data as recited in claim 56, wherein at least some template procedures include actions surrounded by the tag defined by the second selection information, wherein the actions collect information.

58.   A system adapted to convert input data as recited in claim 45, wherein means for executing comprises:

means for traversing selected nodes of the first tree structure, wherein selected nodes are nodes in a range defined by the first selection information of the template procedure;

means for determining, for each node traversed, whether a tag corresponding to the node matches the second selection information;

means for executing at least one corresponding action if a tag corresponding to the node matches the second selection information; and

means for constructing the second document based on content collection actions in the at least one template procedure that is executed.

59.   A system adapted to convert input data as recited in claim 56, wherein the actions of at least one template procedure includes instructions for calling other template procedures.

60.   A system adapted to convert input data as recited in claim 59, wherein the first selection information is based on a starting node from which the template procedure is called.

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61.   A system adapted to convert input data as recited in claim 60, wherein at least one template procedure includes actions creating at least one cloistered temporary variable that is inherited by any template procedures called by the at least one template procedure.

62.   A system adapted to convert input data as recited in claim 60, wherein the template procedures include a base template procedure having the second selection information that corresponds to a root node of the tree structure of the first document such that actions of the base template procedure comprise a call of template procedures.

63.   A system adapted to convert input data as recited in claim 62, wherein the actions of the base template procedure comprises calling template procedures having second selection information that corresponds to a "body" tag.

64.   A system adapted to convert input data as recited in claim 63, wherein the tree structure of nodes of the first document comprises frame nodes, and wherein actions of the base template procedure comprise calling of template procedures having second selection information that matches a frameset tag.

65.   A system adapted to convert input data as recited in claim 64, wherein at least certain template procedures comprise at least one action of redirection toward a first different document.

66.   A system adapted to convert input data as recited in claim 65, wherein at least certain template procedures comprise at least one conditional action based on content of an access address of the first document.

67.   A system adapted to convert input data as recited in claim 66, wherein at least certain template procedures comprise at least one action constituting a method of an object and/or at least one action constituting a programmed local function.

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68.   A system adapted to convert input data as recited in claim 67, wherein certain template procedures comprise a local anchoring function that converts a request, adapted to the structure of the second document, into an address of a first document containing the requested information.

69.   A system adapted to convert input data as recited in claim 48, wherein means for constructing the second document comprises:

means for writing content in certain template procedures that have second selection information that defines a content tag, wherein writing can assemble at least one part of contents of the content tag in a predetermined manner.

70.   A system adapted to convert input data as recited in claim 69, wherein the first documents comprise pages structured in a first standard markup language adapted to consultation on a client computer station via the Internet, and wherein the second documents comprise pages structured in a second standard markup language which is adapted to consultation on a portable wireless communicator.

71.   A system adapted to convert input data as recited in claim 70, wherein means for constructing the second document comprises:

means for constructing the second document in dynamic mode during a session between a wireless communicator that displays information in a structure of the second document and a server that returns information in a structure of the first document.

72.   A system adapted to convert input data as recited in claim 41, wherein the input data is marked up in an HTML markup format and wherein the output data is marked up in an HTML markup format.

73.   A system adapted to convert input data as recited in claim 41, wherein the input data is marked up in an HTML markup format and wherein the output data is marked up in an XML markup format.

74. A system adapted to convert input data as recited in claim 41, wherein the input data is marked up in an HTML markup format and wherein the output data is marked up in a WML markup format.

75. A system adapted to convert input data as recited in claim 41, wherein the input data is marked up in an XML markup format and wherein the output data is marked up in an XML markup format.

76. A system adapted to convert input data as recited in claim 41, wherein the input data is marked up in an XML markup format and wherein the output data is marked up in an HTML markup format.

77. A system adapted to convert input data as recited in claim 41, wherein the input data is marked up in an XML markup format and wherein the output data is marked up in a WML markup format.

78. A system adapted to convert input data as recited in claim 41, wherein the input data is marked up in a WML markup format and wherein the output data is marked up in a WML markup format.

79. A system adapted to convert input data as recited in claim 41, wherein the input data is marked up in a WML markup format and wherein the output data is marked up in an HTML markup format.

80. A system adapted to convert input data as recited in claim 41, wherein the input data is marked up in a WML markup format and wherein the output data is marked up in an XML markup format.

81. A system adapted to convert input data as recited in claim 42, further comprising: means for applying logic to the output data, wherein the means for generating is responsive to a request from the means for applying logic.

82.   A system adapted to convert input data as recited in claim 42, further comprising a repository module associated with the means for generating, the repository module adapted to record and provide profiles and requests that are most frequently selected.

83.   A multi-tier information architecture having tiers connected by a computer network, comprising:

a data consultation tier at a client station;

an application tier on a server;

a data source tier comprising a plurality of independent data sources; and

a data aggregation tier comprising a conversion system adapted to convert input data marked up in any one of a plurality of markup formats, the conversion system including means for providing input data from at least one of the independent data sources, the input data marked up in at least one of a plurality of markup formats, and means for processing the input data directly in any one of the plurality of markup formats to transform the input data into output data in any one of the plurality of markup formats.

84.   A multi-tier information architecture according to claim 83, wherein at least one of the independent data sources comprise Internet servers, rapid-access directory servers and/or database servers with query access.

85.   A multi-tier information / telephone architecture having a plurality of tiers connected by a computer network and by wireless telephone network, comprising:

a data consultation tier for data consultation on a portable wireless communicator;

a transport tier for wireless data transport;

a data source tier comprising at least one data source; and

a conversion tier comprising a conversion system adapted to convert input data marked up in any one of a plurality of markup formats, the conversion system including means for providing the input data from the at least one data source, the input data marked up in at least one of a plurality of markup formats, and means for processing the input data directly in any one of the plurality of markup formats to transform the input data into output data in any one of the plurality of markup formats.

86.   A multi-tier information architecture according to claim 85, wherein the of data source consists of pages structured in a standard markup language adapted to consultation on a client computer station, with the pages constituting first documents, and wherein the conversion system further comprises means for constructing second documents in a second standard markup language adapted to consultation on a portable wireless communicator.